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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER	
EASTHOM,K	
ART UNIT	PAPER NUMBER
2832	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/361,458	Applicant(s) Meigs et al.
Examiner EASTHOM	Art Unit 2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) [X] Responsive to communication(s) filed on *Apr 13, 2001*.

2a) [X] This action is **FINAL**. 2b) [ ] This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) [X] Claim(s) *1-9 and 11-24* is/are pending in the application.

4a) Of the above, claim(s) *12-22* is/are withdrawn from consideration.

5) [ ] Claim(s) _____ is/are allowed.

6) [X] Claim(s) *1-9, 11, 23, and 24* is/are rejected.

7) [ ] Claim(s) _____ is/are objected to.

8) [ ] Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) [ ] The specification is objected to by the Examiner.

10) [ ] The drawing(s) filed on _____ is/are objected to by the Examiner.

11) [ ] The proposed drawing correction filed on _____ is: a) [ ] approved b) [ ] disapproved.

12) [ ] The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) [ ] Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) [ ] All b) [ ] Some* c) [ ] None of:

1. [ ] Certified copies of the priority documents have been received.
2. [ ] Certified copies of the priority documents have been received in Application No. _____.
3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) [ ] Notice of References Cited (PTO-892)
16) [ ] Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) [ ] Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) [ ] Interview Summary (PTO-413) Paper No(s). _____
19) [ ] Notice of Informal Patent Application (PTO-152)
20) [ ] Other:

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 11, the main and sub portions lack antecedent basis. In claim 3, it is not clear what "electrically separate" means since the whole device is connected electrically to each electrode and current flows from one to the other.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by Kojima et al. (WO98/29879). Kojima discloses the claimed invention at Fig. 5. Claim 1 is disclosed as follows: first and second PTC elements-51, first and second electrodes 53, third electrode 52, end terminations 55. The subportions of claims 2-3 are 52b. In claim 4, the joining is depicted. In claims 5-6, see the abstract. In claims 7-9, first and second end terminations have two layers as seen in Fig. 5b, in direct contact as claimed. In claims 10-11, the insulating layer is 54 which is on the first and second electrodes (even if there is another layer therebetween) and/or it directly

touches 53 adjacent the area where it touches the PTC elements 51 so it is "on" there. In claim 24, all the electrodes are in electrical communication with each other.

5. Claims 1-4, 11, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki et al. Sasaki discloses claimed invention at Fig. 2, where the inner two layers 12 are first and second PTC elements having first, second and third electrodes 18, 20, and 19. In claims 2-4, 18 is separated from 20, and 19 from 19, with one a subportion, and the portions 12 are joined thereat, as to claim 4, because the glass 15 joins the two portions 12 all along 15. The two layers of claim 9 are 21,22. In claim 2, the electrodes are electrically separated since no current flows from one to the other. In claim 11, the glass layer 15 meets the claim since it is on the electrodes 18, 20. In claim 23, Sasaki discloses at col. 1, lines 64-66 changing the number of layers to change the resistance, so that only 2 are contemplated.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (WO98/29879) in view of Kojima (WO98/12715). Kojima et al. '79 discloses the claimed invention as noted above with respect to claim 1 except for only two PTC elements. Kojima '715 discloses same at the abstract and shows it as an alternative to a 3 layer device at Figs. 5-6 such as that of Kojima '879 for the obvious purpose of eliminating another parallel layer with the

consequent well known change in resistance, such that it would have been obvious to control the number of layers to control the resistance.

8. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. as applied to claim 1 above, and further in view of Hogge. Sasaki discloses the claimed invention except for employing a polymer and a foil. Hogge discloses the materials are well known for laminated PTC circuit protection devices such as that of Sasaki et al., and it would have been obvious to employ same for the purpose of employing readily known and available PTC materials.

9. Applicant's arguments filed 4/13/01 have been fully considered but they are moot or not persuasive. Applicant argues that the lowermost 53 electrode of Kojima cannot be as interpreted because then the first electrically conductive end termination wrapping around a first and of the device does not electrically contact the second electrode and the second electrically conductive end termination wrapping around a second end of the device does not contact the first electrode. This is not correct for two reasons. First, all electrodes are in electrical contact with each other, since current either flows from one to the other are they are at the same potential. (This argument applies to claim 24 regardless of the current flow explanation). Second, applicant's response seemingly implies that the smaller sub part of 53 cannot be a first electrode, or a part thereof. This is not correct. The insulating layer 54 touches the smaller part of 53 on the bottom and is thus "on" same. .

As to Sasaki, applicant argues the sub and main portions 18, 20 both emit or collect electrodes. It is not seen how this is relevant to any claimed element. As to claim 1, whether

they are "separate" is not understood since this is not claimed. In claim 2, applicant argues there is no main and sub. This is not clear since there is no claimed size distinction, so the top one of Sasaki is designated as main, for example, since it is on top. In claim 3, the electrodes are "electrically separate" where no current flows from one to the other. Applicant apparently uses electrically separate to mean that current flows from one to the other. Neither of these interpretations is a common, since electrically separate would seemingly commonly mean no current flows from sub to main and they are at different potentials. Hence it appears the Examiner's interpretation is equally not as common as applicant's, but reasonable, given applicant's broad but uncommon interpretation. That the glass layer does not aid in bonding in claim 4 is not correct. As to claim 23, see the comment above. The third electrode is as noted.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703) 308-3306. The examiner can normally be reached on M-Th from 6:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Gellner, can be reached on (703) 308-1721. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KARL D. EASTHOM
PRIMARY EXAMINER